

REMARKS

Claims 1-9 are all the claims pending in the application.

Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,411,953 issued to Ganapathy et al.

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ganapathy in view of U.S. Patent 5,710,916 issued to Barbara et al.

Claims 4-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ganapathy and Barbara and further in view of U.S. Patent 6,122,628 issued to Castelli et al.

The Applicants traverse the rejections and request reconsideration.

Rejection of claim 1 based on Ganapathy

The Examiner is believed to be misinterpreting the teachings of Ganapathy. The Examiner cites 12:21-26 of Ganapathy where the following is asserted:

Furthermore, because of the codebook used, this representation facilitates queries containing an overall impression of patterns expressed in a natural way such as "find me all blue-yellow fabrics," "find me the same color but a bit lighter," etc.

The above passage, by no stretch of imagination, could be construed to mean performing changed similarity measure. The Examiner is requested to point out specifically, where in Ganapathy a first similarity measure is used followed by applying search conditions and then performing a changed similarity measurement as required by claim 1. The above passage merely provides examples of a single query. This is not the same as the two step process that is used in the present invention as required by claim 1. Further, the Applicants reiterate the argument made

in the response filed on May 27, 2003. Therein, the Applicants had argued that Ganapathy, in fact, teaches away from changing the similarity measure for the reason that the similarity measure is derived in Ganapathy based on experimentation. A skilled artisan would not have been able to practice the present invention, recited in claim 1, from the teachings of Ganapathy.

Rejections of claims 2-3 based on Ganapathy in view of Barbara

In rejecting claims 2-3, the Examiner has combined the teachings of Ganapathy and Barbara. Ganapathy uses a similarity measure using a set of semantics and rules that are relevant only to five criteria that resulted from an experimental study. The five criteria being directionality, orientation, regularity and placement, color purity and pattern complexity and heaviness. However, Barbara teaches techniques for similarity matching of handwritten objects. Barbara uses entirely different parameters in its similarity measure. The parameters used by Barbara are number of points, maximum angle, number of positive inversions and number of negative inversions.

A skilled artisan would not have been motivated to combine the teachings of Ganapathy and Barbara because such a system simply will not work for its designed purpose. The system suggested by Ganapathy with its rules and grammar will not work with the parameters suggested by Barbara. Likewise, the system suggested by Barbara with its different set of rules and grammar will not work with the parameters suggested by Ganapathy.

Therefore, significant modifications to the design of Ganapathy are required so as to make it work with the parameters of Barbara, and vice versa. Such modification will render the systems of Ganapathy and/or Barbara unsatisfactory for their intended purposes. If the proposed modification would render the prior art inventions being modified unsatisfactory for its purpose,

then there is no suggestion or motivation to combine. MPEP 2143.01, *citing In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Further, the modification will change the principle of operation of Ganapathy because, the set of parameters suggested by Barbara requires a different set of rules and grammar than the ones suggested by Ganapathy. However, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. MPEP 2143.01, *citing In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Still further, even if the teachings of Ganapathy and Barbara are combined, it does not suggest performing a similarity measurement and then applying search conditions limited by the results, followed by performing a changed similarity measurement as noted in the arguments above related to claim 1.

A skilled artisan would not have been able to practice the present invention as recited in claims 2 and 3 from the combined teachings of Ganapathy and Barbara.

Rejection of claims 4-9 based on Ganapathy/Barbara and Castelli

Claims 4-9 are dependent on claim 1 and 3 and are patentable at least in view of their dependency. Further, Castelli does not cure the deficiency noted above in relation to the teachings of Ganapathy/Barbara.

Still further, for the same reasons noted above, the teachings of Castelli cannot be combined with the teachings of Ganapathy/Barbara. Specifically, Castelli teaches cluster analysis. This is believed to be very different from feature vectors and the parameters used for

similarity measurement in Ganapathy and/or Barbara. In Castelli, data is grouped into clusters and the distances refer to the distance between the clusters. This is very different from the distances between feature vectors that are referred to in Ganapathy or Barbara.

Therefore, combining the teachings of Castelli with the teachings of Ganapathy/Barbara will require significant modifications rendering the respective systems unworkable. A skilled artisan would not have been able to practice the present invention as recited in claims 4-9 from the combined teachings of Ganapathy/Barbara/Castelli.

CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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